

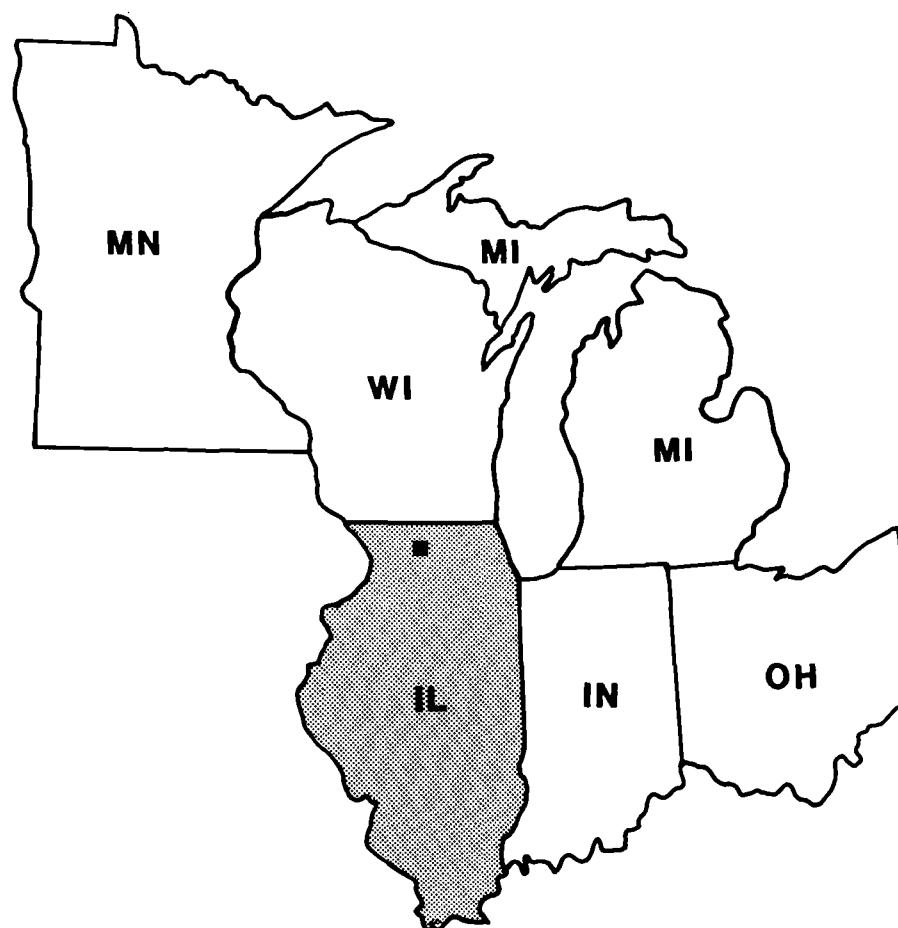


Research and Development



AERIAL PHOTOGRAPHIC ANALYSIS OF THE ROCKFORD PRODUCTS CORPORATION, PLANT #3 Rockford, Illinois

EPA Region 5



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AERIAL PHOTOGRAPHIC ANALYSIS OF THE ROCKFORD PRODUCTS
CORPORATION, PLANT #3

Rockford, Illinois

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NOTICE

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ABSTRACT

This report presents a current analysis of the Rockford Products Corporation, Plant #3, Rockford, Illinois. Current aerial photography dated June 2, 1986 was used to perform the analysis. This analysis was performed to monitor physical conditions and activities that could lead to the contamination of the surrounding environment, specifically surface and/or ground water.

The Rockford Products Corporation, Plant #3 is a manufacturing plant which occupies approximately 20 acres in southwest Rockford, Illinois. The June 1986 photograph shows the plant is fully operational and numerous pollution sources and potential sources were visible. Two surface dumps, two excavations, a pond, a possible landfill, and a leaking tank are visible in the open area just south of the manufacturing area. Staining and spillage were also visible.

The U.S. Environmental Protection Agency's Environmental Monitoring Systems Laboratory in Las Vegas, Nevada, prepared this report for the Agency's Environmental Services Division in Region 5 at Chicago, Illinois and Office of Solid Waste in Washington, D.C.

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INTRODUCTION

This report presents a current analysis of the Rockford Products Corporation, Plant #3 which is located in Rockford, Illinois (Figures 1 and 2). Current aerial photography dated June 2, 1986 was used to perform this analysis. This report was prepared to document the physical conditions and potential hazards at the site.

Table 1 lists all sites being covered under this project.

TABLE 1. REGION 5 SITES COVERED UNDER TS-AMD-86615†

Report serial number†	Site name	Location	Analysis type
1	Olin Corporation	East Alton, IL	Single-date
2	Allied Chemical Corporation	Danville, IL	Single-date
3	Van Tran Electric	Vandalia, IL	Single-date
4	Warner Electric Brake and Clutch Co.	Roscoe, IL	Single-date
5‡	Rockford Products Corporation, Plant #3	Rockford, IL	Single-date
6	Jones and Laughlin Steel	Hennepin, IL	Single-date
7	Crysler Corporation	Belvidere, IL	Single-date
8	Keystone Group, Bartonville Plant	Peoria, IL	Single-date
9	Ilada Energy Corporation	Sugarloaf Heights, IL	Single-date
10	Omega Hills	Menomenee Falls, WI	Single-date

†To identify individual reports, add the report serial number to series number. For Example: TS-AMD-86615-1.

‡Included in this report.

The U.S. Environmental Protection Agency's Environmental Monitoring Systems Laboratory in Las Vegas, Nevada, prepared this report for the Agency's Environmental Services Division in Region 5 at Chicago, Illinois and Office of Solid Waste in Washington, D.C.

METHODOLOGY

Stereoscopic pairs of historical and current aerial photographs are used to perform the analysis. Stereo viewing enhances the interpretation because it allows the analyst to observe the vertical as well as horizontal spatial relationships of natural and cultural features. Stereoscopy is also an aid in distinguishing between various shapes, tones, textures, and colors that can be found within the study area.

Evidence of waste burial is a prime consideration when conducting a hazardous waste analysis. Leachate or seepage resulting from burial and dumping of hazardous materials might threaten existing surface or ground-water sources. Pools of unexplained liquid are routinely noted because they can indicate seepage from buried wastes that may enter drainage channels and allow contaminants to move off the site. An excellent indicator of how well hazardous materials are being handled at a site is the presence or absence of spills, spill stains, and vegetation damage. Trees and other forms of vegetation that exhibit a marked color difference from surrounding members of the same species are labeled "dead," "stressed," or "damaged" based upon the degree of noticeable variation. Vegetation is so labeled only after consideration of the season in which the photographs were acquired.

The U.S. Environmental Protection Agency's Statement of Procedures on Floodplain Management and Wetlands Protection (Executive Orders 11988 and 11990, respectively) requires EPA to determine if removal or remedial actions at hazardous waste sites will affect wetlands or floodplains and to avoid or minimize adverse impacts on those areas. To aid in compliance with these orders, significant wetland areas located within and adjacent to the sites have been identified and delineated. However, the sites have not been visited to verify the accuracy of wetland identification.

Drainage analysis determines the direction a spill or surface runoff would follow. Direction of drainage is determined from analysis of the photographs and from U.S. Geological Survey topographic maps. Whenever they are available, 7.5-minute quadrangle maps (scale 1:24,000) are used to show site location and to provide geographic and topographic information.

Results of the analysis are shown on annotated overlays attached to the photos. The prints in this report have been enlarged when appropriate to show maximum detail. The following table provides documentation of the photographs used in this report.

TABLE 2. DOCUMENTATION OF AERIAL PHOTOGRAPHY

Site name, location, and geographic coordinates	Figures	Date of acquisition	Original scale	Film type†	Photo source‡
Rockford Products Corporation Plant #3 Rockford, Illinois (42°14.2'N 089°05.2'W)	3	June 2, 1986	1:6,000	CC	EMSL

†Film type identification:

CC: Conventional color

‡Photo source identification:

EMSL: U.S. Environmental Protection Agency, Environmental Monitoring Systems
Laboratory, Las Vegas, Nevada.

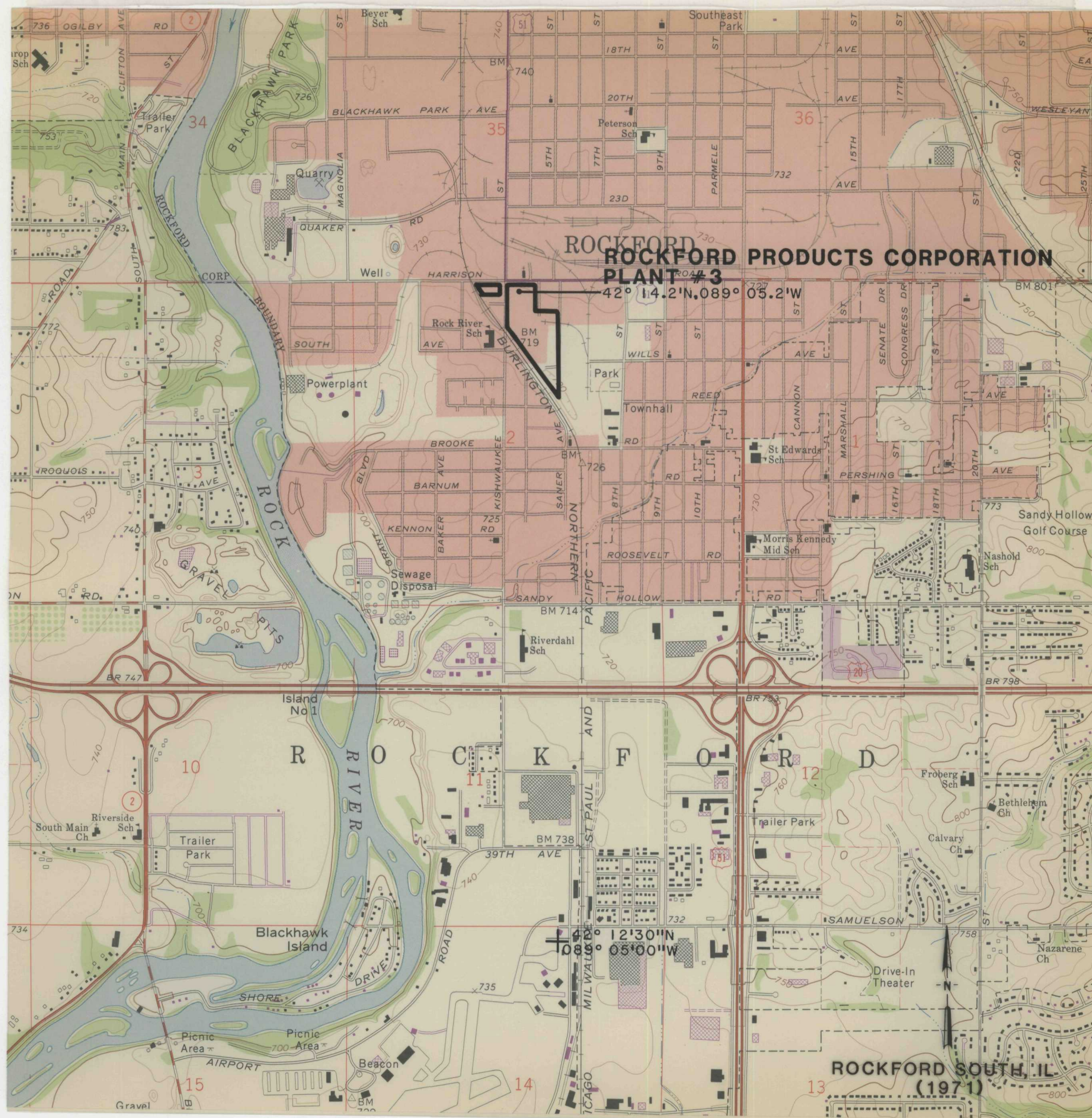


Figure 2. Local Site Location Map Rockford, Illinois. Scale 1:24,000.

ANALYSIS SUMMARY

The Rockford Products Corporation, Plant #3 is a manufacturing plant which occupies approximately 20 acres in southwest Rockford, Illinois. The June 1986 photograph shows the plant is fully operational with numerous pollution sources and potential sources visible. Two surface dumps, two excavations, a pond, a possible landfill, and a leaking tank are visible in the open area just south of the manufacturing area. Staining and spillage were also visible.

The study area is located at an elevation 30 feet above the elevation of the Rock River and could be affected by a 100-year flood event.

PHOTO ANALYSIS

JUNE 2, 1986

This photo (Figure 3) shows the Rockford Corporation Plant #3 and Plant #2. No potential pollution sources are visible at Plant #2. Plant #3, the site under study, contains numerous pollution sources and potential pollution sources. The most significant features include:

<u>Annotation</u>	<u>Description</u>
A Waste Treatment Building*	This building is used to treat cyanide and chrome waste.
A-1 Incinerator*	Nothing significant is visible.
B Incinerator*	Nothing significant is visible.
B-1 Incinerator*	Nothing significant is visible.
C Surface Dump	This area contains solid waste and spoil.
C-1 Surface Dump	This area is mostly mounds of spoil. Solid waste is also visible.
D Excavation	The vegetation growth visible inside indicates the excavation is not new. A rusty drum is visible inside the excavation.
D-1 Excavation	This excavation appears to have had recent soil movement within, suggesting possible burial activity.
E Pond	This pond contains a dark-toned liquid and algae. The pond appears to have been formed by drainage from the site and local drainage network.
F Fill	This area appears to be a revegetated fill (possible landfill). The vegetation on this fill appears stressed.
G Leaking tank	This horizontal tank is leaking an oily liquid. The likely flow path would be south into the pond at Annotation E.

It appears that drainage from the site would flow south into an unnamed stream that empties into Rock Creek.

*Identification of these features was extracted from EPA form 3510-3 (page 5) facility drawing of the Rockford Products Corporation.



INTERPRETATION CODE

BOUNDARIES AND LIMITS

- X—X—X—X FENCED SITE BOUNDARY
- UNFENCED SITE BOUNDARY
- X X X X X X FENCE
- — — — — STUDY AREA

DRAINAGE

- — — — — DRAINAGE
- — — — — FLOW DIRECTION
- — — — — INDETERMINATE DRAINAGE

TRANSPORTATION/UTILITY

- — — — — VEHICLE ACCESS
- + + + — RAILWAY

SITE FEATURES

- ||||| DIKE
- SL STANDING LIQUID
- SL STANDING LIQUID
- EXCAVATION, PIT (EXTENSIVE)
- MOUNDED MATERIAL (EXTENSIVE)
- MM MOUNDED MATERIAL (SMALL)
- CR CRATES/BOXES
- DR DRUMS
- HT HORIZONTAL TANK
- PT PRESSURE TANK
- VT VERTICAL TANK
- CA CLEARED AREA
- DG DISTURBED GROUND
- FL FILL
- IM IMPOUNDMENT
- LG LAGOON
- OF OUTFALL
- SD SLUDGE
- ST STAIN
- SW SOLID WASTE
- TR TRENCH
- VS VEGETATION STRESS
- WD WASTE DISPOSAL AREA
- WL WETLAND

Figure 3. Rockford Products Corporation Plant #3, June 2, 1986. Approximate scale 1:6,000